

REMARKS

Claims 1-43 are pending in the application.

The Applicants respectfully request the Examiner to reconsider earlier rejections in light of the following remarks. No new issues are raised nor is further search required as a result of the changes made herein. Entry of the Amendment is respectfully requested.

Claims 1-43 over Hughes

In the Office Action, claims 1-43 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Combined DES-CBC, HMAC and Replay Prevention Security Transform to J. Hughes ("Hughes"). The Applicants respectfully traverse the rejection.

Claims 1-27 recite a system and method comparing a nonce value of a received out-of-order message with a largest nonce value yet seen.

The Examiner alleges that Hughes discloses determining a largest nonce value yet seen from a nonce value of a received message at pages 3-4 and at pages 10-11 (See Office Action, page 2).

Hughes at pages 3 and 4 discloses a method of preventing attack. A 32 bit incrementing counter starting at a value of 1 is relied on (See Hughes, page 3). A key is relied on to prevent the counter from wrapping, i.e., the key must be changed before $(2^{32})-2$ packets are transmitted using this key (See Hughes, page 3). A receiver must verify that for a given SPI the packets received have non-repeating (non-duplicate) counter values (See Hughes, page 3). This can be implemented as a simple increasing count test or the receiver may choose to accept out-of-order packets as long as it is guaranteed that packets can be received only once, with some allowance for duplication (See Hughes, page 3). A sliding receive window assists in determining if a received out-of-order packet is received more than once (See Hughes, page 3). Hughes at page 4 simply describes what a payload is, what padding is and what pad length is.

Hughes discloses two types of analysis for a received packet, 1) that the received in-order packets have increasing counter values or 2) for out-of-order packets, that the received packets are received only once by checking for non-repeating counter values within a sliding window, with some allowance for repetition. For out-of-order packets, Hughes determines that the received out-of-order packets are received only once by checking for non-repeating counter values within a sliding window. Thus, Hughes discloses comparing a counter value of a received out-of-order packet with all other values received within a sliding window to check for repetition in a counter value, i.e., fails to disclose or suggest comparing a nonce value of a received out-of-order message with a largest nonce value yet seen, as recited by claims 1-27.

Moreover, Hughes at pages 10 and 11 discloses a software routine that implements a 32 packet window. This packet window is defined as the most recent 32 packets to be allowed to arrive out of order, however, only allowed to arrive once (See Hughes, page 3). Thus, as discussed above, Hughes' packet window has nothing to do with determining a largest nonce value yet seen, much less comparing a nonce value of a received out-of-order message with a largest nonce value yet seen, as recited by claims 1-27.

Claims 28-43 recite a system and method of comparing a nonce value to a filter in response to a nonce value of a received out-of-order packet not exceeding a largest nonce value yet seen.

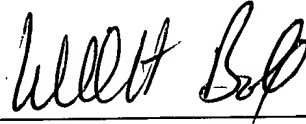
As discussed above, for out-of-order packets, Hughes determines that the received out-of-order packets are received only once by checking for non-repeating counter values. Thus, Hughes discloses comparing a counter value of a received out-of-order packet with all other values received within a sliding window, i.e., fails to disclose or suggest comparing a nonce value to a filter in response to a nonce value of a received out-of-order packet not exceeding a largest nonce value yet seen, as recited by claims 28-43.

Accordingly, for at least all the above reasons, claims 1-43 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William H. Bollman", written over a horizontal line.

William H. Bollman
Reg. No.: 36,457
Tel. (202) 261-1020
Fax. (202) 887-0336

MANELLI DENISON & SELTER PLLC

2000 M Street, NW 7TH Floor
Washington, DC 20036-3307
TEL. (202) 261-1020
FAX. (202) 887-0336

WHB/df